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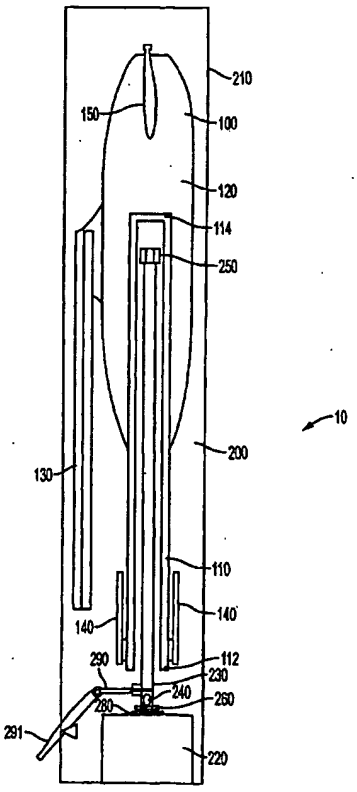
(54) Title: LIGHTWEIGHT AIR VEHICLE AND PNEUMATIC LAUNCHER



(57) Abstract: A portable unmanned air vehicle and launcher system is provided that includes a foldable unmanned air vehicle having a pressure tube; a launch gas reservoir for holding launch gas; a launch tube operatively connected to the launch gas reservoir and having a free end that is positioned in the pressure tube of the air vehicle; a free piston positioned within the launch tube; and a free piston stop to prevent the free piston from leaving the launch tube. A first portion of the launch gas in the launch gas reservoir is released into the launch tube and forces the free piston from an initial position to an end position at which the free piston is stopped by the free piston stop.

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